



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/689,559

10/20/2003

Gerald R. Malan

A0781-701810

8394

37462 7590 01/23/2008
LOWRIE, LANDO & ANASTASI, LLP
ONE MAIN STREET, SUITE 1100
CAMBRIDGE, MA 02142

EXAMINER

GOODCHILD, WILLIAM J

ART UNIT

PAPER NUMBER

2145

NOTIFICATION DATE

DELIVERY MODE

01/23/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@ll-a.com
gengelso@ll-a.com

Office Action Summary	Application No. 10/689,559	Applicant(s) MALAN ET AL.	
	Examiner WILLIAM J. GOODCHILD	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim(s) 21-25 can be considered to be software, a detector adapted to determine a first mapping and a component to generate an alert message can be accomplished using software. In order for a claim to be statutory, it must fall within a process, machine, manufacture, or a composition of matter. Software does not fall within a statutory category since it is not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

Art Unit: 2145

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Del Monte, (US Publication No. 2004/0024823).

In reference to claims 1 and 21, Del Monte teaches a method / system comprising: determining a first mapping [paragraphs 43-44 and Figure 2, item 108]; determining a second mapping [paragraph 37 and Figure 2, item 105]; comparing the first mapping to the second mapping and identifying at least one discrepancy between the first and second mapping [paragraph 37 and Figure 2, item 109]; and generating and sending an alert message to a user, the alert message indicating the at least one discrepancy between the first and second mapping [paragraphs 32, 37 and Fig 2, item 110].

In reference to claim 2, Del Monte teaches the method / system of claim 1 wherein: the act of determining a second mapping comprises acts of querying a nameserver and receiving a response from the nameserver, the response containing the second mapping [paragraphs 43-44].

In reference to claim 3, Del Monte teaches the method / system of claim 1 wherein: the act of determining a first mapping comprises an act of obtaining an authoritative mapping from an authoritative source [paragraphs 43-44].

In reference to claim 4, Del Monte teaches the method / system of claim 3 wherein: the authoritative source is at least one of: an authoritative nameserver; and a database storing a plurality of authoritative mappings [paragraphs 43-44].

In reference to claim 5, Del Monte teaches the method / system of claim 1 further comprising: an act of reporting the at least one discrepancy to a user [paragraphs 32, 37 and Fig 2, item 110].

4. Claims 1-8, 10 and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hrabik et al., (US Publication No. 2002/0178383), (hereinafter Hrabik).

In reference to claims 1 and 21, Hrabik teaches a method / system comprising: determining a first mapping [paragraph 69, lines 4-7]; determining a second mapping [paragraph 69, lines 7-15]; comparing the first mapping to the second mapping [paragraph 69, lines 3-7] and identifying at least one discrepancy between the first and second mapping [paragraphs 15 and 29]; and generating and sending an alert message to a user, the alert message indicating the at least one discrepancy between the first and second mapping [paragraphs 15, 29 and 69].

In reference to claim 2, Hrabik teaches the method / system of claim 1 wherein: the act of determining a second mapping comprises acts of querying a nameserver and

Art Unit: 2145

receiving a response from the nameserver, the response containing the second mapping [paragraph 69, lines 3-7].

In reference to claim 3, Hrabik teaches the method / system of claim 1 wherein: the act of determining a first mapping comprises an act of obtaining an authoritative mapping from an authoritative source [paragraph 69, lines 3-7].

In reference to claim 4, Hrabik teaches the method / system of claim 3 wherein: the authoritative source is at least one of: an authoritative nameserver; and a database storing a plurality of authoritative mappings [paragraph 69, lines 3-7].

In reference to claim 5, Hrabik teaches the method / system of claim 1 further comprising: an act of reporting the at least one discrepancy to a user [paragraphs 15, 29 and 69].

In reference to claim 6, Hrabik teaches the method / system of claim 1 wherein: the first namespace mapping that maps a first name to a first resource and the second mapping is a second namespace mapping that maps a second name to a second resource [paragraph 69, www.company.com].

In reference to claim 7, Hrabik teaches the method / system of claim 6 wherein: the first namespace mapping is stored on an authoritative nameserver and the act of

determining a first mapping comprises an act of obtaining the first mapping from the authoritative nameserver [paragraph 69].

In reference to claim 8, Hrabik teaches the method / system of claim 6 wherein: the act of determining a second mapping comprises acts of querying a nameserver and receiving a response from the nameserver, the response containing the second mapping [paragraph 69].

In reference to claim 10, Hrabik teaches the method / system of claim 8 wherein: the act of querying a nameserver comprises an act of requesting at least one namespace mapping record from the nameserver [paragraph 69].

In reference to claim 22, Hrabik teaches the method of claim 21 further comprising: a database configured to store the first mapping and the second mapping [paragraph 44]

In reference to claim 23, Hrabik teaches the method of claim 22 wherein: the apparatus is configured to obtain an authoritative mapping from an authoritative source and store the authoritative mapping in the database [paragraphs 44 and 69].

In reference to claim 24, Hrabik teaches the method of claim 22 wherein: the apparatus is configured to query a nameserver, and store the second mapping contained within a response received from the nameserver [paragraphs 44 and 69].

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Albitz et al., (DNS and BIND), (hereinafter Albitz).

In reference to claim 16, Albitz teaches a method comprising:

sending a namespace mapping resolution query to a plurality of network nodes [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie - List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver];

waiting for one or more responses from the plurality of network nodes [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie - List all data into /tmp/movie', after typing in the request, the response will print out on screen or to a file as requested in this example, from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver];

determining whether a network node in the plurality of network nodes is a nameserver [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to

Art Unit: 2145

transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver]; and

storing, in a storage device in a monitoring computer, an indication that the network node is a nameserver in response to the act of determining [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver].

In reference to claim 17, Albitz teaches the method of claim 16 wherein:

the act of determining comprises an act of determining whether the network node in the plurality of network nodes is a nameserver based on a format of one or more responses received from the network node [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver].

In reference to claim 18, Albitz teaches the method of claim 16 wherein:

the act of determining comprises an act of determining that the network node in the plurality of nodes is not a nameserver if the network node does not respond to the namespace mapping resolution query [page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver].

In reference to claim 19, Albitz teaches a method comprising:

listening for a request from a non-authoritative nameserver to an authoritative nameserver [page 217, paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response];

when the request is detected, adding the non-authoritative nameserver to a list of nameservers [page 217, paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response]; and

storing the list of nameservers in a memory of a monitoring computer system [page 217, paragraph 5, lines 4-6, When the name server receives a response from one of the remote name servers, it caches the response].

In reference to claim 20, Albitz teaches the method of claim 19 wherein:

the request is a resolve request [page 211, from nslookup routine, 'slate.mines.Colorado.edu.' provides a first mapping, from paragraph 1, this is an authoritative lookup].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9, 11-15 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hrabik as applied to claims 2 and 21 above, and further in view of Albitz.

Regarding claim 9, Hrabik does not specifically disclose an act of compiling a list of nameserver to be queried. However, Albitz, discloses creating a list of nameservers [Albitz, page 220, Zone Transfers, 1st paragraph and page 220, Zone Transfers, paragraph 3, lines 2-3]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate creating a list of nameservers in order to assist in the testing of name resolution.

In reference to claims 11 and 25, Hrabik-Albitz teaches the method / system of claims 9 and 21 wherein: the act of compiling a list of at least one nameserver comprises acts of:

Art Unit: 2145

sending a namespace mapping resolution query to a plurality of network nodes, (page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver); waiting for one or more responses from the plurality of network nodes, (page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', after typing in the request, the response will print out on screen or to a file as requested in this example, from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver); and determining whether a network node in the plurality of network nodes is a nameserver, (page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver).

In reference to claim 12, Hrabik-Albitz teaches the method of claim 11 wherein: the act of determining comprises an act of determining whether the network node in the plurality of network nodes is a nameserver based on a format of one or more responses

Art Unit: 2145

received from the network node, (page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie - List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver).

In reference to claim 13, Hrabik-Albitz teaches the method of claim 11 wherein: the act of determining comprises an act of determining that a network node in the plurality of nodes is not a nameserver if the network node does not respond to the namespace mapping resolution query, (page 220, Zone Transfers, 1st paragraph, 'nslookup can be used to transfer a whole zone using the ls command', page 221, line 26, '> ls -t any movie.edu > /tmp/movie - List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver).

In reference to claim 14, Hrabik-Albitz teaches the method of claim 9 wherein: the act of compiling a list of at least one nameserver comprises an act of: listening for a request from a non-authoritative nameserver to an authoritative nameserver, (page 217, paragraph 4, lines 1-4, 'When a BIND name server gets a query, it looks for the answer in its cache. If it doesn't have the answer, and it is authoritative for the domain, the name server responds that the name doesn't exist or that there is no data for that type.', paragraph 5, lines 4-6, When the name server receives a response from one of the

Art Unit: 2145

remote name servers, it caches the response); and when the request is detected, adding the non-authoritative nameserver to a list of nameservers, (page 217, paragraph 5, lines 4-6, 'When the name server receives a response from one of the remote name servers, it caches the response', caching the response is adding the nameserver to a list of nameservers to use in the future).

In reference to claim 15, Hrabik-Albitz teaches the method of claim 14 wherein: the request is a resolve request, (page 211, from nslookup routine, 'slate.mines.Colorado.edu.' provides a first mapping, from paragraph 1, this is an authoritative lookup).

Response to Arguments

8. Applicant's arguments filed 11/05/2007 have been fully considered but they are not persuasive.

A – Applicant argues "Liu does not disclose, teach or suggest discovery of nameservers and storing of indication that a network node is a nameserver in a monitoring computer."

A – Albitz (Liu) teaches using nslookup to discover a nameserver and storing the nameserver [(page 217, paragraph 5, lines 4-6, 'When the name server receives a response from one of the remote name servers, it caches the response', caching the response is adding the nameserver to a list of nameservers to use in the future and

page 221, line 26, '> ls -t any movie.edu > /tmp/movie – List all data into /tmp/movie', from the list starting on line 29, you can see the mapping resolution from hostnames to ip address and the type of server, i.e. 'NS' identifies a nameserver, 'MX' identifies a mailserver].

9. Applicant's arguments with respect to claims 1 and 21 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments, filed 11/05/2007, with respect to the 101 rejection have been fully considered and are persuasive. The 101 rejection of claims 1-20 has been withdrawn.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2145

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 9:00 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
01/10/2008

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145